

**SYSTEM AND METHOD FOR ORDERING DATA MESSAGES HAVING DIFFERING
LEVELS OF PRIORITY FOR TRANSMISSION OVER A SHARED COMMUNICATION
CHANNEL**

ABSTRACT

Stations of a communication network have internal queues for accumulating and transmitting data messages over a shared communication channel. Each queue within a station accumulates and transmits data messages that have a different level of priority than those accumulated and transmitted by other internal queues of that station. While preferential access to the shared channel is given to data messages having higher levels of priority, data messages having the same priority are transmitted according to a set of rules common to all of the stations. That is, a queue in one of the stations is configured to delay and/or transmit data messages of a given priority level according to a set of rules that applies identically to the queue of any other station that handles data messages of that same priority level. Transmission opportunities are thus fairly allocated between all queues containing data messages of the same priority level.